

What Ships in the Box

- A Menu ARC hardware device.
- This Quick Start Guide.

What You Need to Provide

- A Windows® PC with 1 GHz or higher Pentium® and:
- Windows XP® or higher.
- 250 MB free storage space.
- 1024x768 graphics capability.
- 16-bit or higher colors.
- CD-ROM drive or Internet connection.
- 512 MB or more of RAM as required by your operating system.
- CAT5/6 cables to connect any ARC to any device with an RJ45 ARC port.

Getting Help

All Symetrix software, the Windows applications that control all Symetrix hardware, include a help module which acts as a complete User's Guide for both hardware (including the Menu ARC) and software.

If you have questions beyond the scope of the help module, contact our Customer Support Group in the following ways:

Tel: +1.425.778.7728
8:00 am to 4:30 pm
Monday through Friday,
Pacific Time
Web: <http://www.symetrix.co>
Email: support@symetrix.co

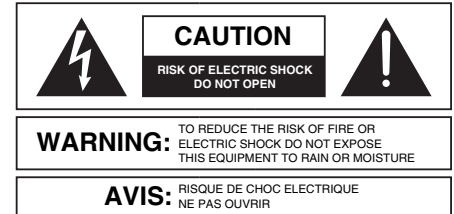
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.
 Cet appareil numérique de la classe B respecte toutes les Exigences du Règlement sur le matériel brouilleur du Canada.

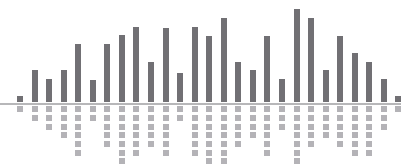
Important Safety Instructions

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- 6 Clean only with dry cloth.
- 7 Do not block any ventilation openings. Install only in accordance with the manufacturer's instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9 This apparatus shall be connected to a mains socket outlet with a protective earthing connection. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11 Only use attachments/accessories specified by the manufacturer.
- 12 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13 Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug cord is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



SEE OWNERS MANUAL. VOIR CAHIER D'INSTRUCTIONS.
 No user serviceable parts inside. Refer servicing to qualified service personnel.
 Il ne se trouve à l'intérieur aucune pièce pouvant être réparée l'utilisateur.
 S'adresser à un réparateur compétent.

- **The lightning flash** with arrowhead symbol within an equilateral triangle is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons. The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product (i.e. this Quick Start Guide).
- **CAUTION:** To prevent electric shock, do not use the polarized plug supplied with the device with any extension cord, receptacle, or other outlet unless the prongs can be fully inserted.
- **Power Source:** This Symetrix hardware uses a universal input supply that automatically adjusts to the applied voltage. Ensure that your AC mains voltage is somewhere between 100-240 VAC, 50-60 Hz. Use only the power cord and connector specified for the product and your operating locale. A protective ground connection, by way of the grounding conductor in the power cord, is essential for safe operation. The appliance inlet and coupler shall remain readily operable once the apparatus has been installed.
- **User Serviceable Parts:** There are no user serviceable parts inside this Symetrix product. In case of failure, customers inside the U.S. should refer all servicing to the Symetrix factory. Customers outside the U.S. should refer all servicing to an authorized Symetrix distributor. Distributor contact information is available online at: <http://www.symetrix.co>.

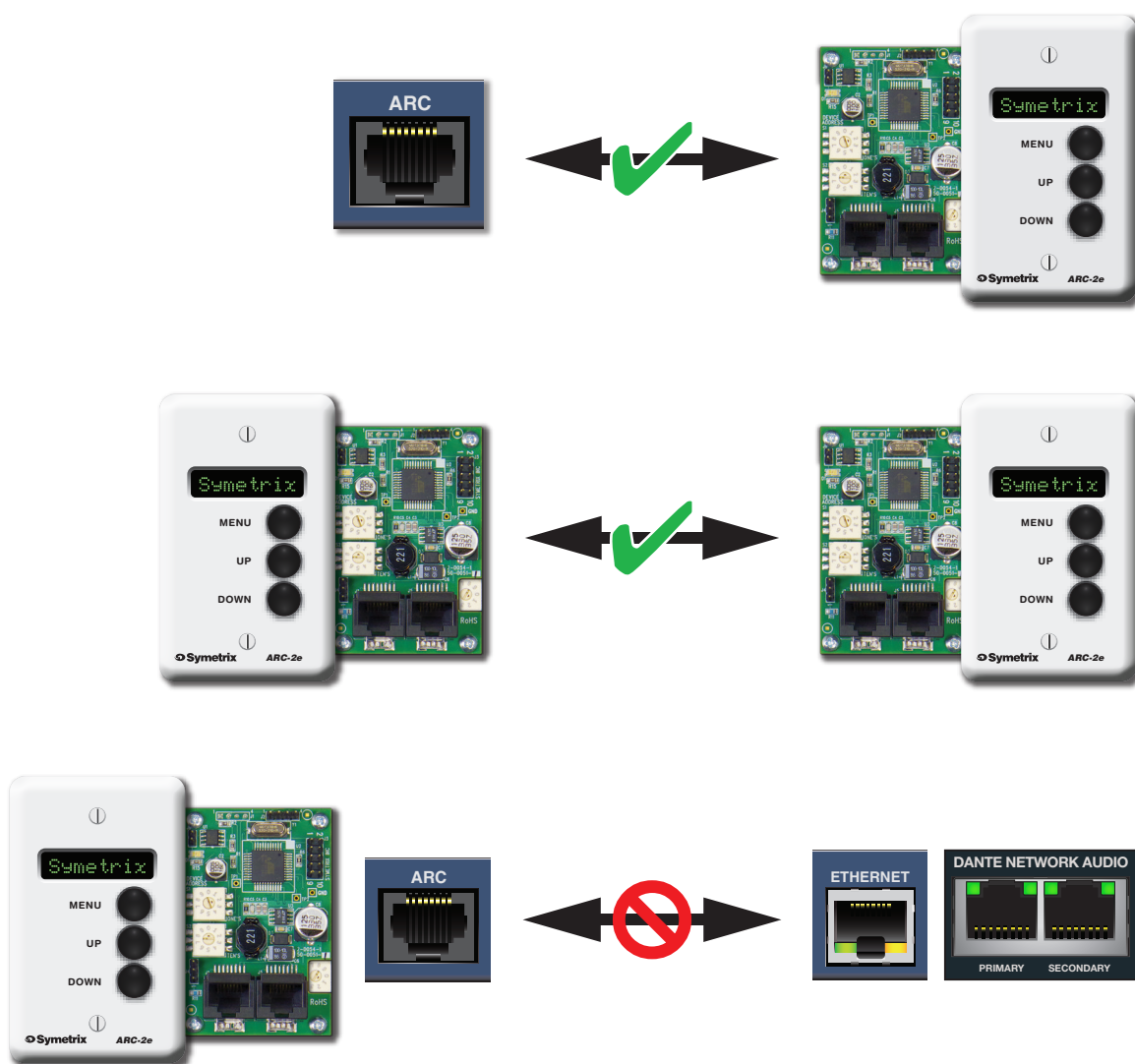


! WARNING! !

The RJ45 connectors labeled “ARC” are only for use with the ARC series of remotes.

DO NOT plug the ARC connectors on Symetrix products into any RJ45 connector labeled “DANTE” or “ETHERNET”.

The “ARC” RJ45 connectors on Symetrix products can carry anywhere from 6 to 24 VDC which can damage Dante and Ethernet circuitry.



Device Addressing

Every RS-485 device connected to the same RS-485 bus must be uniquely identified. The ARC-2e use two rotary switches (S4 and S5) to designate one of 32 device addresses. S4 determines the device's ones address and S5 determines the device's tens address. For example: to set an ARC-2e to device address 24, you would place S1 in the 4 position and S2 in the 2 position.

Connection to Symetrix DSP Devices

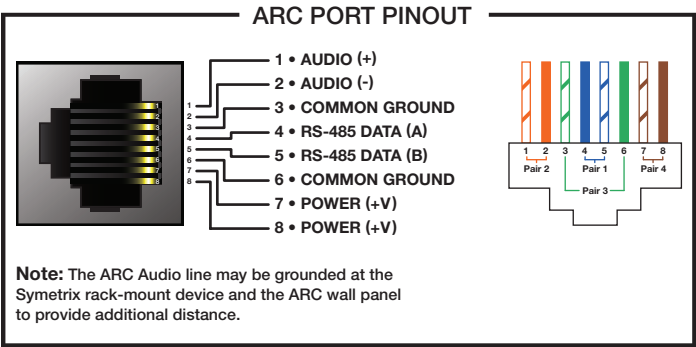
For ARC devices or device chains being powered from the ARC port on a Symetrix DSP device, simply connect the CAT5/6 cable between ARC port and the ARC Wall Panel's RJ45 ports (J5/7 on the Modular ARCs, J5/6 on the ARC-2/2i, and J4/5 on the ARC-2e).

For ARC devices or device chains being powered locally, power must be injected into the RJ45 connectors using a custom wired CAT5/6 cable following the ARC port pinout in the following section.

ARC Pinout

The RJ45 jack distributes power and RS-485 data to one or more ARC devices. Uses standard straight-through UTP CAT5/6 cabling.

Warning! Refer to the RJ45 Warning for compatibility information.



The Symetrix ARC-PSe provides serial control and power distribution over standard CAT5/6 cable for systems with more than 4 ARCs, or, when any number of ARCs are located long distances from a Integrator Series, Jupiter or SymNet DSP unit.

Port Settings: 38.4 kbaud, 8 data bits, 1 stop bit, no parity, no flow control.

RS-485 Termination

The ARC Wall Panels feature an RS-485 termination jumper. Jumper J2 at the top right of an ARC-2e board enables and disables termination. Jumping pins 1 and 2 = terminated. For maximum signal integrity, it is advisable to terminate the last ARC device in the chain if the total length of the chain is over 200 feet. **Note:** Never terminate a single RS-485 bus at more than two devices.

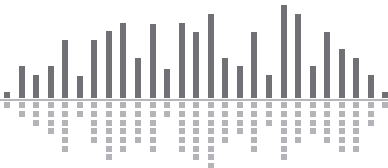
ARC Distance Table

The following table provides at-a-glance cable length limitations based on DC power (the table is not relevant if only RS-485 is distributed) and assumes 24 gauge CAT5/6 cabling. The lengths for multiple ARCs on a single chain assume equal distance for each cable segment between ARCs. Table is intended for quick reference only. For more detailed configuration scenarios, Symetrix has made available a Microsoft Excel spreadsheet to help system designers determine power requirements based upon cable length, number of ARCs, and the power supply to be used. This spreadsheet can be downloaded from the Symetrix Technical Support pages at: symetrix.co/knowledge-base.

Approximate Cable Length Limitations for ARC DC Power Over CAT5/6 Cable	
Number of ARCs in chain	Total cable length (to end of chain)
1	3700 - 4000 ft. / 1127-1219 m
2	1300 - 2000 ft. / 296-609 m
3	700 - 1300 ft. / 213-396 m
4	400 - 950 ft. / 121-289 m

Special note: for multiple ARCs on single chain, the listed value is assumed to be the cable length between each device. For example, a value of 600' means 600' between the DSP unit and the first ARC, 600' between the first and second ARCs, etc. The total cable length will be the listed segment length multiplied by the number of ARCs on the chain.

Warning! When designing an ARC network, one must be careful not to double power any ARCs. If all pins on the CAT5/6 connections are used, power can travel over the CAT5/6 cable and reach any ARC on that particular chain. Power over CAT5/6 could potentially come from the ARC that is powered locally (via a custom wired cable using the pinout above) and then daisy-chained via CAT5/6 to other ARCs, or from a powered ARC port on a SymNet unit or ARC-PSe (preferred). In general, we recommend only supplying power from the start of a chain (a SymNet unit or an ARC-PSe).



The Symetrix Limited Warranty

Symetrix, Inc. expressly warrants that the product will be free from defects in material and workmanship for three (3) years from the date the product is shipped from the factory. Symetrix's obligations under this warranty will be limited to repairing or replacing, at Symetrix's option, the part or parts of the product which prove defective in material or workmanship within three (3) years from the date the product is shipped from the factory, provided that the Buyer gives Symetrix prompt notice of any defect or failure and satisfactory proof thereof. Products may be returned by Buyer only after a Return Authorization number (RA) has been obtained from Symetrix. Buyer will prepay all freight charges to return the product to the Symetrix factory. Symetrix reserves the right to inspect any products which may be the subject of any warranty claim before repair or replacement is carried out. Symetrix may, at its option, require proof of the original date of purchase (dated copy of original retail dealer's invoice). Final determination of warranty coverage lies solely with Symetrix. Products repaired under warranty will be returned freight prepaid via commercial carrier by Symetrix, to any location within the Continental United States. Outside the Continental United States, products will be returned freight collect.

The foregoing warranties are in lieu of all other warranties, whether oral, written, express, implied or statutory. Symetrix, Inc. expressly disclaims any IMPLIED warranties, including fitness for a particular purpose or merchantability. Symetrix's warranty obligation and buyer's remedies hereunder are SOLELY and exclusively as stated herein.

This Symetrix product is designed and manufactured for use in professional and studio audio systems and is not intended for other usage. With respect to products purchased by consumers for personal, family, or household use, **Symetrix expressly disclaims all implied warranties, including but not limited to warranties of merchantability and fitness for a particular purpose.**

This limited warranty, with all terms, conditions and disclaimers set forth herein, shall extend to the original purchaser and anyone who purchases the product within the specified warranty period.

Symetrix does not authorize any third party, including any dealer or sales representative, to assume any liability or make any additional warranties or representation regarding this product information on behalf of Symetrix.

This limited warranty gives the buyer certain rights. You may have additional rights provided by applicable law.

Note: Some Symetrix products contain embedded software or apps and may also be accompanied by control software intended to be run on a personal computer. Said software is specifically excluded from this warranty.

Limitation of Liability

The total liability of Symetrix on any claim, whether in contract, tort (including negligence) or otherwise arising out of, connected with, or resulting from the manufacture, sale, delivery, resale, repair, replacement or use of any product will not exceed the price allocatable to the product or any part thereof which gives rise to the claim. In no event will Symetrix be liable for any incidental or consequential damages including but not limited to damage for loss of revenue, cost of capital, claims of customers for service interruptions or failure to supply, and costs and expenses incurred in connection with labor, overhead, transportation, installation or removal of products, substitute facilities or supply houses.

Servicing Your Symetrix Product

If you have determined that your Symetrix product requires repair services and you live outside of the United States please contact your local Symetrix dealer or distributor for instructions on how to obtain service. If you reside in the U.S. then proceed as follows:

Return Authorization

At the Symetrix factory, Symetrix will perform in-warranty or out-of-warranty service on any product it has manufactured for a period of three (3) years from date of discontinued manufacture.

Before sending anything to Symetrix, please contact our Customer Service Department for a Return Authorization (RA) number. The telephone number is +1.425.778.7728. Additionally, support is available via the web site: <http://www.symetrix.co/knowledge-base>.

In-warranty Repairs

To get your Symetrix product repaired under the terms of the warranty:

1. Call us for an RA number (have the serial number, shipping and contact information and description of the problem ready).
2. Pack the device in its original packaging materials.
3. Include your name, address, daytime telephone number, and a brief statement of the problem.
4. Write the RA number on the **outside** of the box.
5. Ship the device to Symetrix, freight prepaid. We do not accept freight collect shipments.

Just do these five things, and repairs made in-warranty will cost you only one way freight charges. We'll pay the return freight.

If you don't have the factory packaging materials, we recommend using an oversize box. Wrap the device in a plastic bag, surround it with bubble-wrap, and place it in the box surrounded by Styrofoam peanuts. Be sure there is enough clearance in the box to protect the rack ears. We won't return the device in anything but Symetrix packaging for which we will have to charge you. If the problem is due to operator misuse or error, you will have to pay for both parts and labor. In any event, if there are charges for the repair, you will pay for the return freight. Payment for all charges must be pre-arranged (prepaid, Visa or Mastercard).

Out-of-warranty Repairs

If the warranty period has passed, you'll be billed for all necessary parts, labor, packaging materials, and freight charges. Please remember, you must call for an RA number before sending the device to Symetrix.